

SPECIFICATION

Model No.	:	IAA.01
Part No.	:	IAA.01.121111
Product Name	:	External Magnetic Mount Iridium Antenna
Feature	:	1616MHz ~1626.5MHz Custom cables and connectors available RoHS ✓



Version	Date	Page	Revision Description	Prepared	Approved
А	Feb 15 th 2010	All	New product	TW Product Centre	Ronan Quinlan



I Introduction

The IAA.01 is a high performance magnetic mount antenna which is designed specific to communicate efficiently with the Iridium[™] Satellite Communication system.

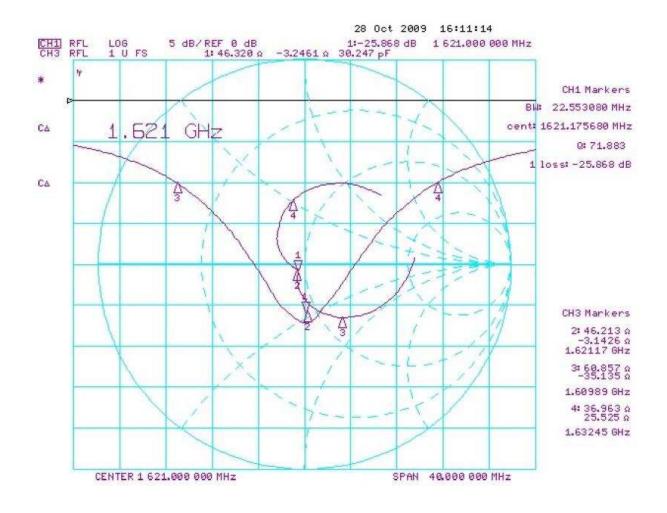
The IAA.01 utilises the Taoglas expertise in ceramics by incorporating a ceramic patch tuned specifically for the antenna environment, giving greater stability. The antenna housing is strong, corrosive proof and waterproof to IP67. The magnetic mount allows for easy installation and removal between vehicles or assets, it is easily converted to an adhesive type for greater flexibility.

II Specification

ParameterSpecificationFrequency Range1616Mhz~1626.5MhzCentre Frequency1621.5MHz ±5.25MHzBandwidth152.5MHzBandwidth15MHzImpedance50 OhmsPolarizationRHCPVSWR1.5 Max (at centre frequency)ConnectorSMA(M)plugCohnectorRG-174CableRG-174Operation Temperature-40°C to + 85°CStorage Temperature-40°C to + 85°CRelative Humidity40% to 95%Dimensions40.5*38*12.3mm		
Centre Frequency1621.5MHz ±5.25MHzBandwidth15MHzImpedance50 OhmsPolarizationRHCPVSWR1.5 Max (at centre frequency)ConnectorSMA(M)plugCableRG-174TerminationAg (Environmentally-Friendly PB Free)Operation Temperature-40°C to + 85°CStorage Temperature-40% to 95%	Parameter	Specification
Bandwidth15MHzImpedance50 OhmsPolarizationRHCPVSWR1.5 Max (at centre frequency)ConnectorSMA(M)plugCableRG-174TerminationAg (Environmentally-Friendly PB Free)Operation Temperature-40°C to + 85°CStorage Temperature-40% C to 95%	Frequency Range	1616Mhz~1626.5Mhz
Impedance50 OhmsPolarizationRHCPVSWR1.5 Max (at centre frequency)ConnectorSMA(M)plugCableRG-174TerminationAg (Environmentally-Friendly PB Free)Operation Temperature-40°C to + 85°CStorage Temperature-40°C to + 85°CRelative Humidity40% to 95%	Centre Frequency	1621.5MHz ±5.25MHz
PolarizationRHCPVSWR1.5 Max (at centre frequency)ConnectorSMA(M)plugCableRG-174TerminationAg (Environmentally-Friendly PB Free)Operation Temperature-40°C to + 85°CStorage Temperature-40% C to 95%	Bandwidth	15MHz
VSWR1.5 Max (at centre frequency)ConnectorSMA(M)plugCableRG-174TerminationAg (Environmentally-Friendly PB Free)Operation Temperature-40°C to + 85°CStorage Temperature-40% C to 95%	Impedance	50 Ohms
ConnectorSMA(M)plugCableRG-174TerminationAg (Environmentally-Friendly PB Free)Operation Temperature-40°C to + 85°CStorage Temperature-40°C to + 85°CRelative Humidity40% to 95%	Polarization	RHCP
CableRG-174TerminationAg (Environmentally-Friendly PB Free)Operation Temperature-40°C to + 85°CStorage Temperature-40°C to + 85°CRelative Humidity40% to 95%	VSWR	1.5 Max (at centre frequency)
TerminationAg (Environmentally-Friendly PB Free)Operation Temperature-40°C to + 85°CStorage Temperature-40°C to + 85°CRelative Humidity40% to 95%	Connector	SMA(M)plug
Operation Temperature-40°C to + 85°CStorage Temperature-40°C to + 85°CRelative Humidity40% to 95%	Cable	RG-174
Storage Temperature-40°C to + 85°CRelative Humidity40% to 95%	Termination	Ag (Environmentally-Friendly PB Free)
Relative Humidity 40% to 95%	Operation Temperature	-40°C to + 85°C
	Storage Temperature	-40°C to + 85°C
Dimensions 40.5*38*12.3mm	Relative Humidity	40% to 95%
	Dimensions	40.5*38*12.3mm

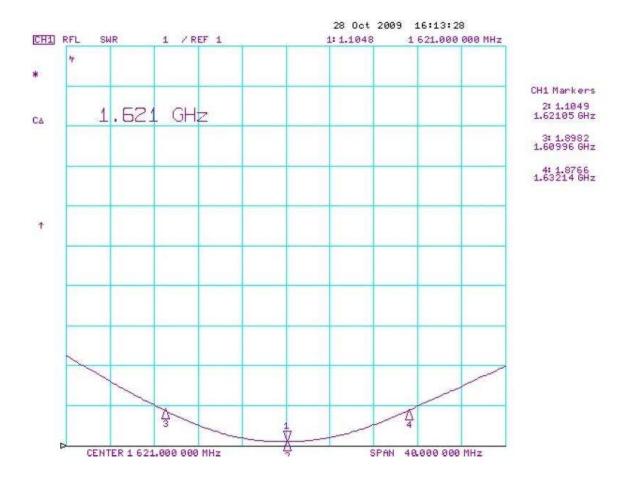


III Performance Measurement and Results



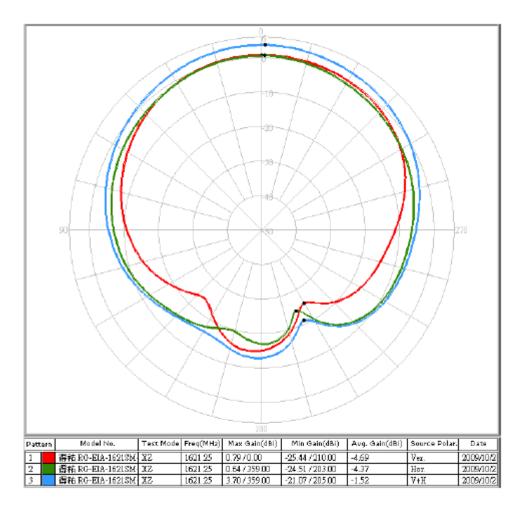


IV VSWR



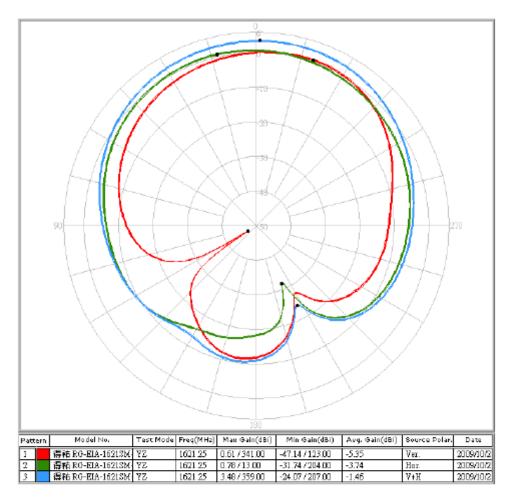


V Antenna Gain Chart



XZ-Plane

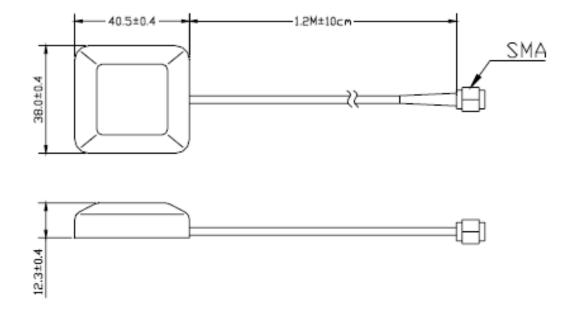


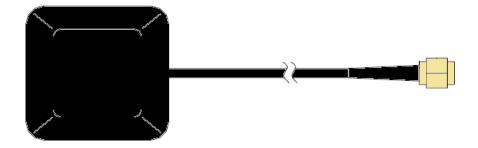


YZ-Plane



VI Drawing







VII Packing Details

100 Units / Carton

